#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: **Chen et al.** § Group Art Unit: **3715** 

\$
Serial No.: **10/631,068**\$ Examiner: **Utama, Robert J.** 

§ Filed: **July 31, 2003** § Confirmation No.: **3486** 

For: Chinese/English Vocabulary 

§ Attorney Docket No.: AUS920030521US1

Learning Tool

37945
PATENT TRADEMARK OFFICE
CUSTOMER NUMBER

Commissioner for Patents P.O. Box 1450 Alexandria VA 22313-1450

# **APPEAL BRIEF (37 C.F.R. 41.37)**

This brief is in furtherance of the Notice of Reinstatement of Appeal, filed in this case on April 7, 2009.

No fees are believed to be necessary. In the event that any additional fees are required for the prosecution of this application, please charge any necessary fees to IBM Corporation Deposit Account No. 09-0457. No extension of time is believed to be necessary. If, however, an extension of time is required, the extension is requested, and I authorize the Commissioner to charge any fees for this extension to IBM Corporation Deposit Account No. 09-0457.

# **REAL PARTY IN INTEREST**

The real party in interest in this appeal is the following party: International Business Machines Corporation of Armonk, New York.

# RELATED APPEALS AND INTERFERENCES

This new appeal is a reinstatement of the appeal filed February 29, 2008 of the same application. The Examiner reopened prosecution in the Office Action dated January 26, 2009. There are no other related appeals or interferences.

# **STATUS OF CLAIMS**

## A. TOTAL NUMBER OF CLAIMS IN APPLICATION

The claims in the application are: 1-41

# B. STATUS OF ALL THE CLAIMS IN APPLICATION

Claims canceled: 2-3, 7, 12-13, 15-16, 20, and 25-41

Claims withdrawn from consideration but not canceled: None

Claims pending: 1, 4-6, 8-11, 14, 17-19, and 21-24

Claims allowed: None

Claims rejected: 1, 4-6, 8-11, 14, 17-19, and 21-24

# C. CLAIMS ON APPEAL

The claims on appeal are claims 1, 4-6, 8-11, 14, 17-19, and 21-24

# **STATUS OF AMENDMENTS**

Appellants did not file an Amendment after Final Rejection. The claims stand as written in the Amendment filed September 14, 2007.

# **SUMMARY OF CLAIMED SUBJECT MATTER**

The following provides a concise explanation of the subject matter defined in each of the separately argued claims involved in the Appeal as required by 37 C.F.R. § 41.37(c)(1)(v). The features are identified by corresponding references to the specification and drawings where applicable. It should be noted that the citations to passages in the specification and drawings for each feature do not imply that the limitations from the specification and drawings should be read into the corresponding claim element. Rather, this summary is provided for the convenience of the Board.

#### A. CLAIM 1 - INDEPENDENT

The subject matter of claim 1 is directed to a computer implemented method for reviewing vocabulary comprising:

using a computer and a graphical user interface (e.g., FIG. 6, GUI 400; Specification p.15, 1.22-p.16, 1.6) on a display connected to the computer, and responsive to a user selecting (FIG. 3, element 206; Specification 10:13-11:3) a chapter from a plurality of chapters (e.g., FIG. 6, chapter menu 402; Specification p.15, 1.22-p.16, 1.6) in a Chinese-English textbook, a question language (e.g., FIG. 6, question language radio buttons 404; Specification 15:22-16:6) from English, Simplified Chinese, Traditional Chinese, or Pin Yin, and an answer language (e.g., FIG. 6, answer language radio buttons 406; Specification 15:22-16:6) from English, Simplified Chinese, Traditional Chinese, or Pin Yin, displaying a plurality of vocabulary words from the chapter (e.g., FIG. 7, GUI 500; Specification 16:7-9),

displaying a question (e.g., FIG. 4, element 310 and FIG. 8, question 604; Specification 12:8 and 16:10-20) containing a vocabulary word in the question language;

responsive to the user inputting (FIG. 4, element 312; Specification 12:8-9) an answer in the answer language, determining (FIG. 4, element 314; Specification 12:8-21) if the answer is a correct answer;

responsive to the vocabulary word or the answer being in Simplified Chinese (Specification 12:22-13:8), translating the vocabulary word or the answer into Traditional Chinese (*id.*) by accessing a Simplified Chinese/Traditional Chinese conversion table (e.g., FIG. 4, conversion table 320; Specification 12:22-13:8);

wherein a determination if the answer is a correct answer (FIG.4, element 314; Specification 12:8-21) is performed by determining whether the vocabulary word and the answer both match an entry in a Traditional Chinese/Pin Yin/English dictionary encoded in Unicode (Specification 12:8-21).

#### B. CLAIM 14 - INDEPENDENT

The subject matter of claim 14 is directed to a program product stored on a computerusable medium and operable on a computer, the program product comprising:

instructions to cause the computer to display a graphical user interface (e.g., FIG. 6, GUI 400; Specification p.15, l.22-p.16, l.6) on the computer;

responsive to a user selecting (FIG. 3, element 206; Specification 10:13-11:3), at the graphical user interface, a chapter from a plurality of chapters (e.g., FIG. 6, chapter menu 402; Specification p.15, l.22-p.16, l.6) in a Chinese-English textbook, a question language (e.g., FIG. 6, question language radio buttons 404; Specification 15:22-16:6) from either English, Simplified Chinese, Traditional Chinese, or Pin Yin, and an answer language (e.g., FIG. 6, answer language radio buttons 406; Specification 15:22-16:6) from either English, Simplified Chinese, Traditional Chinese, or Pin Yin, instructions for displaying a plurality of vocabulary words from the chapter (e.g., FIG. 7, GUI 500; Specification 16:7-9);

instructions for displaying, at the graphical user interface, a question (e.g., FIG. 4, element 310 and FIG. 8, question 604; Specification 12:8 and 16:10-20) containing a vocabulary word in the question language;

responsive to a user inputting, at the graphical user interface, (FIG. 4, element 312; Specification 12:8-9) an answer in the answer language, instructions for determining (FIG. 4, element 314; Specification 12:8-21) if the answer is a correct answer;

responsive to the vocabulary word or the answer being in Simplified Chinese (Specification 12:22-13:8), translating the vocabulary word or the answer into Traditional Chinese (*id.*) by accessing a Simplified Chinese/Traditional Chinese conversion table (e.g., FIG. 4, conversion table 320; Specification 12:22-13:8); and

responsive to determining (FIG.4, element 314; Specification 12:8-21) that the vocabulary word and the answer both match an entry in a Traditional Chinese/Pin Yin/English

dictionary encoded in Unicode (Specification 12:8-21), instructions for indicating, at the graphical user interface, that the answer is a correct answer.

#### C. CLAIM 5 - DEPENDENT

The subject matter of claim 5 is directed to the method of claim 1 further comprising: calculating the probability factors (FIG. 4, element 304; Specification 11:18-12:3) for the plurality of vocabulary words; and

wherein the probability factor determines a probability that the vocabulary word will appear in a question (Specification 11:18-12:3).

## D. CLAIM 8 - DEPENDENT

The subject matter of claim 8 is directed to the method of claim 1 further comprising: wherein responsive to a determination that the answer is correct (FIG. 4, element 316; Specification 13:9-15), decrementing a probability factor for the vocabulary word (*id.*).

## E. CLAIM 10 - DEPENDENT

The subject matter of claim 10 is directed to the method of claim 1 further comprising: wherein responsive to a determination that all of the vocabulary words in a chapter have a probability factor equal to one (FIG 4, element 328; Specification 13:16-14:2), indicating that the chapter is completed (FIG. 12 element 700; Specification 18:14-18).

# **GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

The grounds of rejection to review on appeal are as follows:

# A. GROUND OF REJECTION 1

Whether the Examiner properly rejected claims 1, 4, 14, and 17 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent Application Publication No. 2003/0027122 (Stansvik), in view of U.S. Patent No. 5,873,111 (Edberg), in view of U.S. Patent Application Publication No. 2001/019329 (Kobayashi), and further in view of U.S. Patent No. 5,525,060 (Loebner). Office Action dated January 26, 2009 pp. 2-4.

# B. GROUND OF REJECTION 2

Whether the Examiner properly rejected claims 5, 6, 18 and 19 under 35 U.S.C. § 103(a) as being unpatentable over Stansvik, in view of Edberg, in view of Kobayashi, in view Loebner, and further in view of U.S. Patent Application 2003/0180699 (Resor). Office Action dated January 26, 2009 p. 5.

## C. GROUND OF REJECTION 3

Whether the Examiner properly rejected claims 8, 9, 21 and 22 under 35 U.S.C. § 103(a) as being unpatentable over Stansvik, in view of Edberg, in view of Kobayashi, in view of Loebner, and further in view of U.S. Patent No. 6,022,221 (Boon). Office Action dated January 26, 2009 pp. 5-6.

#### D. GROUND OF REJECTION 4

Whether the Examiner properly rejected claims 10 and 23 under 35 U.S.C. § 103(a) as being unpatentable over Stansvik, in view of Edberg, in view of Kobayashi, in view of Loebner, in view of Resor and further in view of U.S. Patent No. 7,367,808 (Frank). Office Action dated January 26, 2009 pp. 6-7.

# E. GROUND OF REJECTION 5

Whether the Examiner properly rejected claims 11 and 24 under 35 U.S.C. § 103(a) as being unpatentable over Stansvik, in view of Edberg, in view of Kobayashi, in view of Loebner, and further in view of U.S. Patent Application Publication No. 2002/0151366 (Walker). Office Action dated January 26, 2009 pp. 4-5.

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#### **ARGUMENT**

# A. GROUND OF REJECTION 1 (Claims 1, 4, 14 and 17 – Group A)

Claims 1, 4, 14, and 17 stand rejected under 35 U.S.C. § 103(a) over Stansvik, in view of Edberg, in view of Kobayashi, and further in view of Loebner. Office Action dated January 26, 2009 pp. 2-4. This rejection is respectfully traversed.

The Examiner bears the burden of establishing a prima facie case of obviousness based on prior art when rejecting claims under 35 U.S.C. § 103. In re Fritch, 972 F.2d 1260, 23 U.S.P.Q.2d 1780 (Fed. Cir. 1992). The prior art reference (or references when combined) must teach or suggest all the claim limitations. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). In determining obviousness, the scope and content of the prior art are... determined; differences between the prior art and the claims at issue are... ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background the obviousness or nonobviousness of the subject matter is determined. Graham v. John Deere Co., 383 U.S. 1 (1966). "Often, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue." KSR Int'l. Co. v. Teleflex, Inc., 127 S. Ct. 1727, 1740-41 (2007). "Rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. Id. (citing In re Kahn, 441 F.3d 977, 988 (CA Fed. 2006))."

Claim 1 is representative of group A (claims 1, 4, 14 and 17) with respect to ground of rejection 1, and the same arguments made for Claim 1 apply to claims 4, 14 and 17.

A.1. The Proposed Combination Fails to Teach or Suggest "responsive to a user selecting . . . a question language from English, Simplified Chinese, Traditional Chinese, or Pin Yin, and an answer language from English, Simplified Chinese, Traditional Chinese, or Pin Yin, displaying . . ."

The Examiner has failed to meet the burden of establishing a *prima facie* case of obviousness in the present case because the proposed combination of references, considered as a whole, does not teach or suggest all the limitations of Claim 1. For example, the proposed

combination of references does not teach or suggest "responsive to a user selecting . . . a question language from English, Simplified Chinese, Traditional Chinese, or Pin Yin, and an answer language from English, Simplified Chinese, Traditional Chinese, or Pin Yin, displaying . . . ."

The Examiner admits Stansvik fails to teach these limitations and alleges Loebner teaches these limitations. Office Action dated January 26, 2009 pp. 3-4 (citing to Loebner, col. 3, ll. 5-37). Loebner is directed to a multiple card flash card that assists memorization in English and Chinese. *See* Loebner, Abstract. Loebner teaches a multiple card, flash card wherein one language is displayed at a time. *See* Loebner, col. 3, ll. 25-32 (stating that three flips display words in pinyin, orthodox, and simplified and a fourth flip will display English). In response to this very same argument, the Examiner also stated that "[n]o where in the limitation of claim 1 and 14 requires the simultaneous selection of question language and answer languages." Office Action dated January 26, 2009 pp. 7-8.

Applicants respectfully disagree. Claim 1 recites that "displaying a plurality of vocabulary words" is "responsive to a user selecting ... a question language . . ., <u>and</u> an answer language." (Emphasis added). This claim limitation requires a user to select an answer language and a question language. Loebner fails to teach or suggest this limitation because Loebner only teaches displaying one language at a time. Loebner does not teach or suggest selecting a question language and an answer language, for Loebner is silent to these limitations.

Thus, Loebner does not teach or suggest "responsive to a user selecting . . . a question language from English, Simplified Chinese, Traditional Chinese, or Pin Yin, and an answer language from English, Simplified Chinese, Traditional Chinese, or Pin Yin, displaying . . . ." Even if the combination of references could be made as asserted by the Examiner, the combination would not teach or suggest the presently claimed invention in claim 1, because the above discussed features believed to be disclosed by Loebner are not taught or suggested. By implication, the Examiner admits that none of the other cited references teach or suggest this claimed feature. Consequently, claim 1 is not obvious in view of the proposed combination of the references. The Examiner failed to meet the burden of establishing a *prima facie* case of obviousness rejection against claim 1 and any other claim in this grouping of claims.

Therefore, it is respectfully requested that the rejection of claims 1, 4, 14 and 17 under 35 U.S.C. § 103(a) be reversed.

A.2. The Proposed Combination Fails to Teach or Suggest "wherein a determination if the answer is a correct answer is performed by determining whether the vocabulary word and the answer both match an entry in a Traditional Chinese/ Pin Yin/English dictionary encoded in Unicode"

The proposed combination of references also fails to teach or suggest "wherein a determination if the answer is a correct answer is performed by determining whether the vocabulary word and the answer both match an entry in a Traditional Chinese/Pin Yin/English dictionary encoded in Unicode." In rejecting claim 1, Examiner states:

Stansvik also provided a teaching if the answer is a correct answer is performed by determining whether the vocabulary of the word and the answer both match an entry in dictionary encoded (see Stansvik paragraph 57). However, Stansvik is silent on what kind of encoding used in the dictionary. Edberg provide a teaching in the background of the invention that an electronic dictionary is better served when implemented using the Unicode encoding (see Edberg '111 col. 2:7-25 and col. 3:9-42).

Office Action dated January 21, 2009 p. 3.

Even if, *arguendo*, Stansvik taught "determining whether the vocabulary of the word and the answer both match an entry in dictionary" and Edberg taught "encoded in Unicode," the combination fails to teach or suggest "determining whether the vocabulary word and the answer both match an entry in a <u>Traditional Chinese/Pin Yin/English dictionary</u> encoded in Unicode." (Emphasis added). The Examiner does not appear to state where any of the cited references teach or suggest anything matching an entry in a Traditional Chinese/Pin Yin/English dictionary. Neither Stansvik nor Edberg teach or suggest "determining whether . . . match an entry in a Traditional Chinese/Pin Yin/English dictionary", and these references are silent as to this limitation of claim 1. The other references of Kobayashi and Loebner are not relied upon and do not remedy these deficiencies.

Thus, the proposed combination of references does not teach or suggest "wherein a determination if the answer is a correct answer is performed by determining whether the vocabulary word and the answer both match an entry in a Traditional Chinese/Pin Yin/English dictionary encoded in Unicode." Even if the combination of references could be made as asserted by the Examiner, the combination would not teach or suggest the presently claimed invention in claim 1, because the above discussed features believed to be disclosed by Stansvik or Edberg are not taught or suggested. By implication, the Examiner admits that none of the

other cited references teach or suggest this claimed feature. Consequently, claim 1 is not obvious in view of the proposed combination of the references. The Examiner failed to meet the burden of establishing a *prima facie* case of obviousness rejection against claim 1 and any other claim in this grouping of claims.

Furthermore, with respect to the above discussed features of claim 1 not disclosed by the cited references, neither Stansvik nor Edberg teach, suggest, or give any incentive to make the changes needed to reach the presently claimed invention. Even if the combination of references could be made as asserted by the Examiner, absent some teaching, suggestion, or incentive to modify Stansvik and Edberg in this manner, the presently claimed invention can be reached only through an improper use of hindsight using the applicants' disclosure as a template to make the necessary changes to reach the claimed invention.

Therefore, it is respectfully requested that the rejection of claims 1, 4, 14 and 17 under 35 U.S.C. § 103(a) be reversed.

# A.3. The proposed combination of Stansvik in view of Loebner cannot be made because the proposed combination renders the cited reference inoperable for its intended purpose

The Examiner has failed to meet the burden of establishing a *prima facie* case of obviousness in the present case because the proposed combination renders the cited reference inoperable for its intended purpose.

The Federal Circuit has stated:

We have noted elsewhere, as a "useful general rule," that references that teach away cannot serve to create a prima facie case of obviousness. *In re Gurley*, 27 F.3d 551, 553, 31 USPQ2d 1130 (Fed. Cir. 1994). If references taken in combination would produce a "seemingly inoperative device," we have held that such references teach away from the combination and thus cannot serve as predicates for a prima facie case of obviousness. *In re Sponnoble*, 405 F.2d 578, 587, 160 USPQ 237, 244, 56 C.C.P.A. 823 (1969) (references teach away from combination if combination produces seemingly inoperative device); *see also In re Gordon*, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984) (inoperable modification teaches away).

McGinley v. Franklin Sports, Inc., 262 F.3d 1339, 1354, 60 U.S.P.Q.2d 1001, 1010 (Fed. Cir. 2001).

In this case, the proposed combination would render Stansvik's system inoperable for its intended purpose because the combination would no longer permit tracking of a user's progress. Stansvik teaches a system that displays a question, waits for a student to answer, and then displays a next question. E.g., Stansvik FIG. 2, elements 20, 24, and 36. Loebner teaches a multiple card flash card that displays one of four languages at a time. Loebner, col. 3, ll. 25-32 (stating that three flips display words in pinyin, orthodox, and simplified and a fourth flip will display English). Stansvik's system is intended to test students for mastery of educational topics (see Stansvik, Abstract), which is accomplished by using a question and answer sequence and tracking a user's progress based on the answers. See Stansvik FIGS. 4, 9 and para. 71. To make the proposed combination would replace Stansvik's question and answer sequence with Loebner's displaying one language at a time. By making such a modification, Stansvik's system would no longer track a user's progress since the system would no longer require answers to questions, which are the basis for Stansvik's tracking. In other words, the combination would simply display one of four languages and be unable to track a user's progress because the system would no longer require questions. Hence, the proposed combination renders Stansvik's system inoperable for its intended purpose of tracking a user's progress.

In response to this argument, the Examiner stated that "the test is what the combined teachings of the references would have suggested to those or ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981)." Office Action dated January 26, 2009 p. 8. While this may be true, the Federal Circuit has clearly stated that "If references taken in combination would produce a 'seemingly inoperative device,' we have held that such references teach away from the combination and thus cannot serve as predicates for a prima facie case of obviousness." *McGinley*, 262 F.3d at 1354, 60 U.S.P.Q.2d at 1010 (quoting *In re Sponnoble*, 405 F.2d at 587, 160 USPQ at 244, 56 C.C.P.A. 823).

In other words, if proposed combination would render the prior art invention being modified inoperable for its intended purpose, then the proposed combination cannot be made the proposed modification. While the teachings of Stansvik and Loebner may suggest certain things to those of ordinary skill in the art, the proposed combination of Stansvik in view of Loebner cannot serve as predicates for a *prima facie* case of obviousness, in the present case, because the proposed combination renders Stansvik's system inoperable for its intended purpose. Thus, the

Examiner failed to meet the burden of establishing a *prima facie* case of obviousness rejection against claim 1 and any other claim in this grouping of claims.

Therefore, it is respectfully requested that the rejection of claims 1, 4, 14 and 17 under 35 U.S.C. § 103(a) be reversed.

# B. GROUND OF REJECTION 2 (Claims 5, 6, 18 and 19 – Group B)

Claims 5, 6, 18, and 19 stand rejected under 35 U.S.C. § 103(a) over Stansvik, in view of Edberg, in view of Kobayashi, in view Loebner, and further in view of Resor. Office Action dated January 26, 2009 p. 5. This rejection is respectfully traversed.

Claim 5 is representative of group B (claims 5, 6, 18 and 19) with respect to ground of rejection 2, and the same arguments made for Claim 5 apply to claims 6, 15 and 19.

# **B.1.** The Proposed Combination Fails to Teach or Suggest "calculating the probability factors for the plurality of vocabulary words"

The Examiner has failed to meet the burden of establishing a *prima facie* case of obviousness in the present case because the proposed combination of references, considered as a whole, does not teach or suggest all the limitations of Claim 5. For example, the proposed combination of references does not teach or suggest "calculating the probability factors for the plurality of vocabulary words."

In rejecting claims 5, 6, 18 and 19, the Examiner states:

The Stan[s]vik fails to provide a teaching on calculating the probability factors of vocabulary words, wherein the probability factors determine the probability (or frequency) that the vocabulary word appear in question (or will be asked in a question). However, the Resor reference provides a teaching of the probability factors of vocabulary words, wherein the probability factors determine the probability (or frequency) that the certain problem appear in question (or will be asked in a question) [see paragraph 354 and 189].

Office Action dated January 26, 2009 p. 5

The Examiner admits Stansvik fails to teach the limitations of claim 5. However, the Examiner does not assert where Resor or any other references teaches or suggests "calculating the probability factors for the plurality of vocabulary words" as recited in claim 5. Further, this limitation is not taught or suggested by Resor. Resor is directed to a learning aid for teaching

arithmetic skills. *See* Resor, Abstract. Resor may disclose an assignment of a relative probability to arithmetic problems, and this relative probability can influence the frequency with which a particular arithmetic problem occurs. *See* Resor, para. 189. However, Resor does not disclose any calculation of a probability factor for any plurality of vocabulary words. This is because Resor is silent with regard to any such calculation and also silent with regard to any such probability factor being for a plurality of vocabulary words.

Thus, Resor does not teach or suggest "calculating the probability factors for the plurality of vocabulary words." Even if the combination of references could be made as asserted by the Examiner, the combination would not teach or suggest the presently claimed invention in claim 5, because the above discussed features believed to be disclosed by Resor are not taught or suggested. By implication, the Examiner admits that none of the other cited references teach or suggest this claimed feature. Consequently, claim 5 is not obvious in view of the proposed combination of the references. The Examiner failed to meet the burden of establishing a *prima facie* case of obviousness rejection against claim 5 and any other claim in this grouping of claims.

Therefore, it is respectfully requested that the rejection of claims 5, 6, 18 and 19 under 35 U.S.C. § 103(a) be reversed.

# **B.2.** The Examiner Failed to State a Proper Reason to Combine the References to Achieve the Legal Conclusion of Obviousness

The Examiner failed to state a proper reason to modify Stansvik in view of Resor to achieve the legal conclusion of obviousness of claim 5 under the standards of *KSR Int'l*. In combining references, an explicit analysis is required to combine or modify references. The Supreme Court has stated the following:

Often, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, this analysis should be made explicit. See *In re Kahn*, 441 F. 3d 977, 988 (CA Fed. 2006) ('[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness'). As our precedents make clear, however, the analysis

need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.

KSR Int'l, 127 S. Ct. at 1740-41.

Regarding a reason to modify Stansvik, the Examiner states only that:

Therefore, it would have been obvious at the time of the invention for one of ordinary skilled in the art to include the features of on calculating the probability factors of vocabulary words, wherein the probability factors determine the probability (or frequency) that the vocabulary word appear in question, as taught by [Resor], in order to

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As can be seen, an express analysis has not been provided in the Examiner's reasons for combining the references. The statements made by the Examiner do not provide reasons as required in the Supreme Court guidance on combining references as stated in *KSR Int'l*. Instead, the Examiner has only provided statements that are conclusory or reciting some desired goal. The Examiner has merely offered a goal or desire to include the features similar those of claim 5 alleged to be taught by Resor. To meet this goal, the Examiner just states it would have been obvious at the time of the invention to one of ordinary skill in the art. Nowhere, however, has the Examiner gone beyond this conclusory statement to explain sufficiently why one of ordinary skill in the art would have combined these two references. These conclusions or desired goals have not been supported with any explicit analysis or articulated reasoning with some rationale underpinnings to support the conclusions or goals for combining the elements in these two references in the manner proposed by the Examiner.

Thus, the Examiner's statement is both conclusory and provides no articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. Accordingly, under the standards of *KSR Int'l*., the Examiner failed to state a *prima facie* obviousness rejection against claim 5 and any other claim in this grouping of claims.

Additionally, no proper reason exists to combine the references. Neither Stansvik nor Resor teach, suggest, or give any incentive to combine or modify the proposed combination of the four previously cited references in further view of Resor as alleged to reach the presently claimed invention, in a manner that compels the legal conclusion that claim 5 is obvious in view of the references considered together as a whole. Thus, for an additional reason, the Examiner failed to

state a *prima facie* obviousness rejection against claim 5 and any other claim in this grouping of claims.

Therefore, it is respectfully requested that the rejection of claims 5, 6, 18 and 19 under 35 U.S.C. § 103(a) be reversed.

# C. GROUND OF REJECTION 4 (Claims 8, 9, 21 and 22 - Group C)

Claims 8, 9, 21 and 22 stand rejected under 35 U.S.C. § 103(a) over Stansvik, in view of Edberg, in view of Kobayashi, in view Loebner, in view of Resor, and further in view of Boon. Office Action dated January 26, 2009 pp. 5-6. This rejection is respectfully traversed.

Claims 8, 9, 21 and 22 depend from and inherit all the features and limitations of independent claims 1 and 14, respectively. As discussed above, claims 1 and 14 comprise features and limitations that are outside the scope of the cited art and were improperly rejected. Thus, claims 8, 9, 21 and 22 comprise features and limitations that are outside the scope of the cited art.

Further, the rejection of claims 8, 9, 21 and 22 comprises a reference to Resor. As previously discussed, the Examiner has failed to state a proper reason to modify the proposed combination of references to include Resor. Thus, for an additional reason, the Examiner failed to state a *prima facie* obviousness rejection against claims 8, 9, 21 and 22.

Therefore, it is respectfully requested that the rejection of claims 8, 9, 21 and 22 under 35 U.S.C. § 103(a) be reversed.

# D. GROUND OF REJECTION 5 (Claims 10 and 23 – Group D)

Claims 10 and 23 stand rejected under 35 U.S.C. § 103(a) over Stansvik, in view of Edberg, in view of Kobayashi, in view Loebner, in view of Resor, and further in view of Frank. Office Action dated January 26, 2009 pp. 6-7. This rejection is respectfully traversed.

Claim 10 is representative of group D (claims 10 and 23) with respect to ground of rejection four, and the same arguments made for Claim 10 apply to claim 23.

D.1. The Proposed Combination Fails to Teach or Suggest "wherein responsive to a determination that all of the vocabulary words in a chapter have a probability factor equal to one, indicating that the chapter is completed"

The Examiner has failed to meet the burden of establishing a *prima facie* case of obviousness in the present case because the proposed combination of references, considered as a whole, does not teach or suggest all the limitations of Claim 10. For example, the proposed combination of references does not teach or suggest "wherein responsive to a determination that all of the vocabulary words in a chapter have a probability factor equal to one, indicating that the chapter is completed."

The Examiner admits Stansvik fails to teach these limitations and alleges Frank teaches these limitations. Office Action dated January 26, 2009 pp. 5-6 (citing to Frank, col. 14 ll. 40-50). Frank is directed to improving employee retention by focusing on retention competencies. *See* Frank, Abstract. The portion cited by the Examiner appears to disclose a competency performance indicator and retention quotient that, if high enough, indicates that a supervisor does not need to repeat a competency evaluation module. *See* Frank, col. 14 ll. 40-50. Frank also discloses notifying a user of a passing score if 80% of simulation questions have been answered correctly. *See* Frank, col. 7 ll. 57-59. While Frank may teach a performance indicator or a retention quotient for a competency evaluation module and an allowable percentage of correctly answered questions, Frank is silent as to a determination that all vocabulary words in a chapter have a certain probability factor. In other words, while Frank may teach evaluation of percentages of questions answered correctly, Frank is silent to a probability factor, much less determining that all the questions in a competency evaluation module have a probability factor equal to one.

Thus, Frank does not teach or suggest "a determination that all of the vocabulary words in a chapter have a probability factor equal to one." Even if the combination of references could be made as asserted by the Examiner, the combination would not teach or suggest the presently claimed invention in claim 10, because the above discussed features believed to be disclosed by Frank are not taught or suggested. By implication, the Examiner admits that none of the other cited references teach or suggest this claimed feature. Consequently, claim 10 is not obvious in view of the proposed combination of the references. The Examiner failed to meet the burden of establishing a *prima facie* case of obviousness rejection against claim 10 and any other claim in this grouping of claims.

Further, the rejection of claims 10 and 23 comprises a reference to Resor. As previously discussed, the Examiner has failed to state a proper reason to modify the proposed combination of

references to include Resor. Thus, for an additional reason, the Examiner failed to state a *prima* facie obviousness rejection against claims 10 and 23.

Therefore, it is respectfully requested that the rejection of claims 10 and 23 under 35 U.S.C. § 103(a) be reversed.

#### **D.2.** Frank is Non-Analogous Art

The Examiner has failed to state a *prima facie* obviousness rejection against claim 10 because Frank is non-analogous art. In order to rely on a reference as a basis for rejection, the reference must be either in the Appellants' field of endeavor or, if not, then reasonably pertinent to the particular problem with which the inventor was concerned. *In re Oetiker*, 977 F.2d 1443, 24 U.S.P.Q.2d 1443, 1445 (Fed. Cir. 1992); *In re Deminski*, 796 F.2d 436, 442, 230 U.S.P.Q. 313, 315 (Fed. Cir. 1986).

In the case at hand, Frank is not in the same field of endeavor as the claimed invention, and Frank is not reasonably pertinent to the particular problem with which Appellants are concerned. With regard to the first part of the test for analogous art, Frank is not in the same field of endeavor as claim 10 because Frank is in the field of improving employee retention. *See* Frank, Abstract. In contrast, claim 10, at least by virtue of its dependency on claim 1, is in the field of learning Chinese and English vocabulary. The two fields are completely distinct from each other because the methods and techniques taught by the two references are completely distinct from each other. Thus, Frank fails the first test of *In re Oetiker*.

With regard to the second part of the test for analogous art, Frank is not reasonably pertinent to the particular problem with which Appellants were concerned. As established above, Frank is in the field of improving employee retention. Specifically, Frank is directed to the problem of improving employee retention by focusing on retention competencies. *See* Frank, Abstract. In contrast, claim 10 is directed to the problem of learning Chinese and English vocabulary words and the multiple written dialects of Chinese. The problem addressed by Frank is completely distinct from the problem addressed by claim 10. For this reason, Frank is not reasonably pertinent to the particular problem with which Appellants were concerned. Therefore, Frank fails the second part of the *In re Oetiker* test for analogous art.

Because Frank fails both tests presented in *In re Oetiker*, Frank is non-analogous art to claim 10. Accordingly, under the standards of *In re Oetiker*, Frank cannot be used as a reference

vis-à-vis an obviousness rejection against claim 10. Hence, the Examiner failed to state a *prima* facie obviousness rejection against claim 10.

Therefore, it is respectfully requested that the rejection of claims 8, 9, 21 and 22 under 35 U.S.C. § 103(a) be reversed.

# E. GROUND OF REJECTION 5 (Claims 11 and 24)

Claims 11 and 24 stand rejected under 35 U.S.C. § 103(a) over Stansvik, in view of Edberg, in view of Kobayashi, in view of Loebner, and further in view of Walker. Office Action dated January 26, 2009 pp. 4-5.

Claims 11 and 24 depend from and inherit all the features and limitations of independent claims 1 and 14, respectively. As discussed above, claims 1 and 14 comprise features and limitations that are outside the scope of the cited art and were improperly rejected. Thus, claims 11 and 24 comprise features and limitations that are outside the scope of the cited art. Walker is not relied upon and does not remedy these deficiencies. Therefore, Appellants respectfully request that the rejection be reversed.

# F. CONCLUSION

As shown above, the Examiner has failed to state valid rejections against any of the claims. Therefore, Appellants request that the Board of Patent Appeals and Interferences reverse the rejections. Additionally, Appellants request that the Board direct the Examiner to allow the claims.

Date: April 7, 2009 Respectfully submitted,

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## **CLAIMS APPENDIX**

The text of the claims involved in the appeal is as follows:

1. A computer implemented method for reviewing vocabulary comprising:

using a computer and a graphical user interface on a display connected to the computer, and responsive to a user selecting a chapter from a plurality of chapters in a Chinese-English textbook, a question language from English, Simplified Chinese, Traditional Chinese, or Pin Yin, and an answer language from English, Simplified Chinese, Traditional Chinese, or Pin Yin, displaying a plurality of vocabulary words from the chapter,

displaying a question containing a vocabulary word in the question language;
responsive to the user inputting an answer in the answer language, determining if the
answer is a correct answer;

responsive to the vocabulary word or the answer being in Simplified Chinese, translating the vocabulary word or the answer into Traditional Chinese by accessing a Simplified Chinese/Traditional Chinese conversion table;

wherein a determination if the answer is a correct answer is performed by determining whether the vocabulary word and the answer both match an entry in a Traditional Chinese/Pin Yin/English dictionary encoded in Unicode.

4. The method of claim 1 further comprising:

displaying statistics regarding the user's performance in answering a plurality of questions.

- 5. The method of claim 1 further comprising: calculating the probability factors for the plurality of vocabulary words; and wherein the probability factor determines a probability that the vocabulary word will appear in a question.
- 6. The method of claim 1 further comprising:

  calculating the probability factors for the plurality of vocabulary words; and

  wherein the probability factor determines the frequency with which the vocabulary word

  will be asked in a question.
- 8. The method of claim 1 further comprising:

  wherein responsive to a determination that the answer is correct, decrementing a probability factor for the vocabulary word.
- 9. The method of claim 1 further comprising:
  wherein responsive to a determination that the answer is incorrect, incrementing a probability factor for the vocabulary word.

The method of claim 1 further comprising:

10.

wherein responsive to a determination that all of the vocabulary words in a chapter have a probability factor equal to one, indicating that the chapter is completed.

- 11. The method of claim 1 further comprising:changing the font size of the Chinese characters displayed on a graphical user interface.
- 14. A program product stored on a computer-usable medium and operable on a computer, the program product comprising:

instructions to cause the computer to display a graphical user interface on the computer; responsive to a user selecting, at the graphical user interface, a chapter from a plurality of chapters in a Chinese-English textbook, a question language from either English, Simplified Chinese, Traditional Chinese, or Pin Yin, and an answer language from either English, Simplified Chinese, Traditional Chinese, or Pin Yin, instructions for displaying a plurality of vocabulary words from the chapter;

instructions for displaying, at the graphical user interface, a question containing a vocabulary word in the question language;

responsive to a user inputting, at the graphical user interface, an answer in the answer language, instructions for determining if the answer is a correct answer;

responsive to the vocabulary word or the answer being in Simplified Chinese, translating the vocabulary word or the answer into Traditional Chinese by accessing a Simplfied Chinese/Traditional Chinese conversion table; and

responsive to determining that the vocabulary word and the answer both match an entry in a Traditional Chinese/ Pin Yin/English dictionary encoded in Unicode, instructions for indicating, at the graphical user interface, that the answer is a correct answer.

17. The program product of claim 14 further comprising: instructions for displaying statistics regarding a user's performance in answering a plurality of questions.

18. The program product of claim 14 further comprising: instructions for calculating the probability factors for the plurality of vocabulary words; and

wherein the probability factor determines the probability that a particular vocabulary word will appear in a question.

19. The program product of claim 14 further comprising: instructions for calculating the probability factors for the plurality of vocabulary words; and

wherein the probability factor determines the frequency with which the vocabulary word will be asked in a question.

21. The program product of claim 14 further comprising:

wherein responsive to a determination that the answer is correct, instructions for decrementing a probability factor for the vocabulary word.

22. The program product of claim 14 further comprising:

wherein responsive to a determination that the answer is incorrect, instructions for incrementing a probability factor for the vocabulary word.

# 23. The program product of claim 14 further comprising:

wherein responsive to a determination that all of the vocabulary words in a chapter have a probability factor equal to one, instructions for indicating that the chapter is completed.

# 24. The program product of claim 14 further comprising:

instructions for changing the font size of the Chinese characters displayed on a graphical user interface.

# **EVIDENCE APPENDIX**

This appeal brief presents no additional evidence ("none").

# RELATED PROCEEDINGS APPENDIX

Prosecution in the present application was reopened in Office Action dated January 26, 2009 in view of the appeal filed on February 29, 2008 as referenced above in the "Related Appeals and Interferences" statement. Thus, Applicants believe there are no related decisions by a court or the Board ("none").